

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

The abstract, specification and claims have been amended above so as to obviate the formality-based grounds of objection.

In response to the rejection of claims 10-15 under 35 U.S.C. §101, claims 10, 12 and 14 have been amended as suggested by the Examiner to overcome this ground of rejection. Claims 11, 13 and 15 have been cancelled without prejudice or disclaimer.

Accordingly, all issues under 35 U.S.C. §101 are now believed to have been resolved in the applicant's favor.

The rejection of claims 1 and 4-9 under 35 U.S.C. §102 as allegedly anticipated by Yavits '847 is respectfully traversed.

In known video surveillance systems, problems arise when data from surveillance cameras are transmitted over low bit-rate network connections. Data can either be sent directly in video format (such as MPEG) suffering from such low quality as to be useless to the viewer, or alternatively as a series of still images (such as JPEG) which, for low data rates, each take significant time to download. This can be particularly inconvenient when the frame turns out to be visually irrelevant and the user is forced to request an alternative frame.

In applicant's invention, still images are sent to the viewer, each being progressively refined with time (as is the case in JPEG). However, this is then combined with predictive encoding when a user requests an alternative frame. In predictive encoding, the subsequent frame is encoded by exploiting similarity with respect to the previously transmitted frame. This means that the newly transmitted image appears with almost immediately the same high quality as the previous progressively enhanced frame had reached.

Predictive encoding itself is already used within standard moving image video codes such as MPEG. However, in this context it is only used to send a stream of constantly changing (e.g., 30 frames per second) frames of a moving picture each encoded, for example, with respect to the previous frame. It will be also noted that such encoding occurs automatically without any user request for a next frame.

The applicant's invention however comes into play after an initial version of a single frame has been sent to a user--when the same frame is continuously fed as input into the encoder to improve the image progressively. Later, whenever a new still image is requested by the user, the new frame is input into the encoder (regardless of whether the new still image was recorded earlier or later in time) and the new frame is now encoded in relation to the previous progressively enhanced frame selected by the user.

Yavits is merely another example of rapid (e.g., 30 Hz) automatic inter-frame coding of moving picture frames. Claim 1 has now been amended to refer to still pictures, rather than possibly to moving picture video data. In fact, claim 1 now further recites a step of capturing still pictures to help further distinguish the claimed invention from conventional digital moving picture technology. Of course, claim 1 also requires a user request to cause selection of a different frame for input to the encoder/decoder.

Independent claims 6 and 9 have been similarly amended so as to make it clear that the claimed apparatus and/or method is directed to the processing of a plurality of still images (i.e., so as to produce a still image for viewing by a user). Claims 6 and 9 also require user requests to change the frame input to the encoder/decoder.

Given such fundamental deficiencies with respect to these features of all independent claims, it is not believed necessary to discuss additional deficiencies of Yavits with respect to

other features of the rejected independent claims or additional features brought out by the rejected dependent claims.

The rejection of claims 2 and 3 under 35 U.S.C. §103 as allegedly being made "obvious" based on Yavits in view of King '211 is also respectfully traversed.

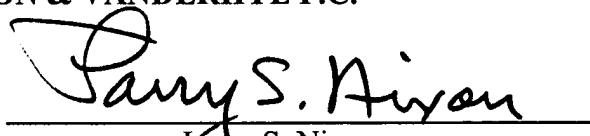
Deficiencies of Yavits have already been noted above. King does not supply those deficiencies. Indeed, King, like Yavits, is directed to dealing with rapid automatic encoding, transmitting and decoding of motion picture frames--and presenting the resultant motion pictures for view by the user. This is completely in contrast with the applicant's claimed invention for processing and presenting still image to a viewer--and then responding to a user request before inputting a different frame to the encoder/decoder.

Accordingly, this entire application is now believed to be in allowable condition and a formal notice to that effect is respectfully solicited.

Respectfully submitted,

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ABSTRACT OF THE DISCLOSURE

~~A method of generating video data~~ Video for is generated transmission to a ~~user~~ user, particularly for use in a video surveillance system. ~~The method comprises generating a~~ A first representation of a first image is generated and one or more further representations of the first image are then generated, ~~said the~~ further representation(s) being predicted from a previously generated representation of the first image. In response to a request for a subsequent image, a first representation of ~~said the~~ subsequent image ~~being is~~ is predicted from a representation of the first image. Then one or more further representations of ~~said the~~ subsequent image are generated, ~~said the~~ further representations of ~~said the~~ subsequent image being predicted from a previously generated representation of ~~said the~~ subsequent image. Thus, the same source data for a first image is fed into the encoder, so producing a progressive still image at the decoder. When a different image is required, the encoder substitutes, as the input to the encoder, the source picture from the requested point in time. This source picture is encoded predictively from the original ~~image~~ image.